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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,723	01/17/2006	Heinz Geier	10191/3927	9885
26646	7590	06/08/2007	EXAMINER	
KENYON & KENYON LLP			CYGAN, MICHAEL T	
ONE BROADWAY			ART UNIT	
NEW YORK, NY 10004			PAPER NUMBER	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/516,723	Applicant(s) GEIER ET AL.	
	Examiner Michael Cygan	Art Unit 2855	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 April 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 18-20, 22-28, 30 and 32-38 is/are pending in the application.
- 4a) Of the above claim(s) 36-38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32, 34 and 35 is/are rejected.
- 7) ☒ Claim(s) 18-20, 22-28, 30 and 33 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claims 18-20, 22-28, 30, and 32-35 are objected to because of the following informalities: the phrase "a half of the sensor element facing the measuring gas" in claim 18 is unclear. The claim is rejected under the other alternative limitation (centered along a longitudinal extension). Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 32 and 34 are rejected under 35 U.S.C. 102(a) as being anticipated by Geier (US 6,347,543 B1). Geier discloses the claimed invention, a gas sensor comprising a sensor element [6] for measuring oxygen and temperature, a metal housing [7], a sealing element [1,2,3], a metal receptacle [18] that may be integrally welded to a sleeve [14], where the sealing element is centered along the sensor element (Figure 1), the metal receptacle [18] includes an outward-facing perpendicular section (Figure 5) and adjoins a measuring gas chamber (Figure 1), the sealing element [28,30] is friction joined to the sensor element [22] and receptacle [26], where the receptacle [18] has a cup-shape (Figure 1) and the bottom of the receptacle includes a

Art Unit: 2855

recess for the sensor element [6], where the distance between receptacle and element is less than twice the height of the sensor element (Figure 1). The seal may be a high-melting glass near the exhaust side [1] and a low-melting glass near the rear [2]; column 2 lines 32-48. The seal may alternatively be composed of a ceramic [1] and a glass [2]; column 2 lines 32-48. See entire document.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 35 is rejected under 35 U.S.C. 103(a) as being unpatentable over Geier (US 6,347,543 B1) in view of Weyl (US 6,474,655 B1). Geier teaches the claimed invention except for the use of a pressed ceramic powder arranged between a first ceramic and second (glass or glass ceramic) sealing elements. Weyl teaches a seal formed from a pressed ceramic powder [37] between ceramic [21] and glass ceramic [36] sealing elements (figure 2 and column 3) in a gas sensor having a cup-shaped receptacle and sensor element. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a pressed ceramic powder arranged between a first ceramic and second (glass or glass ceramic) sealing elements as taught by Weyl in the invention of Geier, since Weyl teaches that such a

Art Unit: 2855

composition substantially reduces the permeability to gaseous and liquid hydrocarbons (column 3 lines 5-22).

### ***Allowable Subject Matter***

Claims 18-20, 22-28, 30, and 33 are objected to, but would be allowable if the claim objection to the language of claim 18 is overcome, for the reasons as substantially set forth in applicant's response.

### ***Response to Arguments***

Applicant's arguments filed 02 April 2007 have been fully considered but they are not persuasive. Claims 32 and 34 remain rejected as set forth in the previous Office action; applicant presented no arguments against the art applied to those rejections.

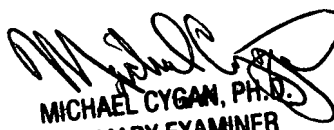
With respect to the objections to the claims, the language "at . . . a half of the sensor element facing the measuring gas" used in the claims is slightly different from that in the specification, "on the half of sensor element that faces the measuring gas." This difference, while slight, creates unacceptable uncertainty in the scope of the claims.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Cygan whose telephone number is (571) 272-2175. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
MICHAEL CYGAN, PH.D.  
PRIMARY EXAMINER